Life after teenage motherhood

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The general view has been that teenage childbearing will have long-term negative effects on the mother's well-being. The argument being that these individuals will have more difficulty completing high school because of the time off required for pregnancy, recuperation and childcare. And so, it is also less likely that they will be able to continue on to postsecondary education to acquire the skills for better jobs. Since low-skilled jobs tend to pay less, it follows that teenage mothers will have a higher likelihood of living in low income.

Indeed, American research during the 1970s and 1980s consistently documented the negative effects of teenage childbearing across a range of outcomes, finding that teenage mothers were more likely to be socially and economically disadvantaged throughout their lives than women who delayed childbearing. Teenage mothers were also less likely to complete their education, be employed and earn high wages, or be married. Furthermore, they were more likely to have larger families and receive welfare (Hayes 1987). Not only is the well-being of teenage mothers affected by their situation, teenage motherhood is also a repetitive cycle that can affect the likelihood that their children end up in the same situation. Indeed, one study found that, in the U.S., daughters of teenage mothers were 25 percentage points more likely to become teenage mothers themselves (Kearney and Levine 2007).

However, according to more recent research, the link between teenage childbearing and a poor socioeconomic outcome may not be causal—the probability of being a teenage mother and the probability of being disadvantaged later on may be due to having a disadvantaged family background from the start.[1] That is, women from disadvantaged backgrounds are more likely to end up disadvantaged even if they delay childbearing. And while teenage childbearing continues to be a significant indicator of lower socioeconomic outcomes, the effect is smaller than originally believed (Ashcraft and Lang 2006; Levine and Painter 2003; Klepinger et al. 1997 and 1995; Ahn 1994; Hoffman et al. 1993).

Although research in the United States has placed tremendous efforts in disentangling the causal effects of teenage childbearing and family background, the research on this issue in Canada remains scarce. Most research in Canada has focused on trends in incidence and abortion rates using vital statistics data. Furthermore, the bulk of the research has been on educational outcomes, with few studies on other long-term socioeconomic outcomes such as labour force participation and living conditions. And while U.S. studies

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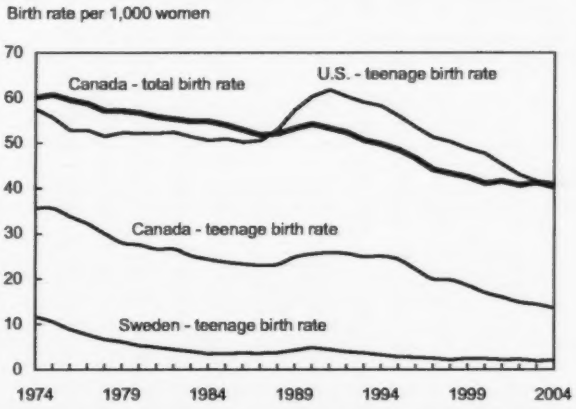
Chart A Canada's teenage birth rate in the mid-range among developed countries



Sources: Statistics Canada, Health Statistics Division, Canadian Vital Statistics Database; U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics; National Vital Statistics System as published by Guttmacher Institute; Statistics Sweden, online statistical database.

show that teenage childbearing occurs predominantly among visible minority groups, Canada's very different ethnic profile suggests that the characteristics of teenage mothers in Canada may be very different.

Certainly the birth rate differs between the two countries. Canada remains far below the United States, which had a rate of 41.1 births per 1,000 teenage women in 2004 and has traditionally had the highest teenage birth rate of all developed countries (Chart A). In 2004, Canada had 31,611 teenage pregnancies (30.5 per 1,000 women aged 15 to 19), of which 14,075 resulted in live births (4.2% of all births that year). And although Canada's teenage birth rate fell dramatically from 35.7 to 13.6 during the last two decades, in 2004 it was still almost seven times higher than Sweden's, which continues to have one of the lowest teenage birth rates of all developed countries.

Using the Survey of Labour and Income Dynamics (SLID), this study examines the personal and long-term socioeconomic characteristics of women aged 30 to 39 who gave birth as teenagers (see *Data source and definitions*). SLID carries information on the education of the parents of teenage mothers, which provides a proxy for family background. Specifically, this paper compares women who were teenage mothers with those who were adult mothers with respect to educational outcome, long-term labour force participation, and low-income status.

Teenage motherhood more than double among women with Aboriginal background

Among women who reported an Aboriginal background, 24% were teenage mothers compared with just 10% of other mothers. While Aboriginal background in SLID includes only those living off-reserve and is not representative of the whole Aboriginal population, those who reported an Aboriginal background in this study represented 3.8% of the sample compared with 3.5% of the population in 2001 and 4.0% in 2006.[4]

Unlike in the United States, immigrant women (visible minority or not) in Canada have a lower likelihood of being teenage mothers than native-born women not in a visible minority (Chart B). These results likely

Data source and definitions

The **Survey of Labour and Income Dynamics** (SLID) covers roughly 97% of the Canadian population, excluding those in the territories, in institutions, on Aboriginal reserves or in military barracks. Each panel of respondents, approximately 15,000 households and 30,000 adults, is surveyed for six consecutive years. A new panel is introduced every three years, so two panels always overlap. This study pools the first cross-sectional wave of each of the five existing panels of SLID (1993, 1996, 1999, 2002 and 2005) in order to attain an adequate sample of women who were teenage mothers.

The study was restricted to women aged 30 to 39 in each reference year.[2] The upper age limit minimized cohort differences while maintaining an adequate sample of teenage mothers; the lower limit gave teenage mothers a chance to 'catch up' to adult mothers in terms of education. For example, most women graduate from high school by age 17 or 18, and college or university by age 22 to 25, but because teenage mothers may have a harder time completing their studies due to the birth of their first child (and possibly subsequent children), they may not have completed their highest level of education until their late twenties or older.

The sample excluded women who had never given birth (5,262) or for whom the age at first birth is missing (700). The final sample consisted of 19,064 mothers aged 30 to 39 during the reference year, just over 10% of whom gave birth as teenagers.

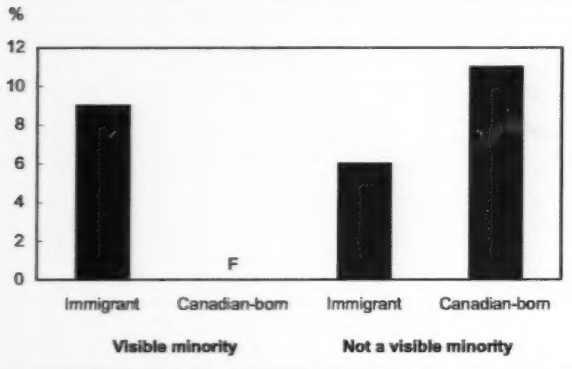
Teenage mothers are women who had their first birth under the age of 20. **Adult mothers** had their first birth at age 20 or older. A binary variable was derived using the self-reported 'age at first birth.' This was set to 1 for first birth under age 20 and 0 for first birth at a later age.[3]

Education refers to the highest level completed at the time of the survey, recoded into three groups: less than high school; high school diploma; and postsecondary degree, certificate or diploma.

Low income measures (LIMs) are set at 50% of median family income and adjusted for the number of people, reflecting the economies of scale inherent in family size and composition. The adjustment is based on the **family equivalence scale**, which is the sum of the 'equivalences' for each family member. The oldest person receives an equivalence of 1.0 and the second oldest person 0.4. All others 16 and older receive an equivalence of 0.4 and those under 16 receive 0.3. This adjusts family income for family size and composition in order to enable comparison of incomes for all families.

Disability status summarizes several questions. Starting with the 1999 reference year, the screening questions were significantly modified to reflect those used in the 2001 Census. For this reason, interpretation of the results must be made with care.

Chart B Teenage childbearing lower among immigrants and visible minorities



Note: Results are restricted to those with a valid response.
Source: Statistics Canada, Survey of Labour and Income Dynamics, 1993, 1996, 1999, 2002 and 2005.

Table 1 Marriage and marital status of teenage and adult mothers

	Teenage mothers	Adult mothers
	%	
Age at first marriage		
Under 20	49*	8
20 to 24	19*	43
25 to 29	9*	28
30 to 39	4*	7
Never married	19*	13
Marriage and birth		
Married prior to birth	20*	72
Married same year as birth	22*	6
Married post birth	39*	8
Never married	19*	13
Current marital status		
Married	60*	76
Common-law	14*	10
Separated	9*	5
Divorced	7*	4
Widowed	F	0E
Never married	10*	5

* statistically significant from adult mothers at the 0.05 level or better
Note: Results are restricted to those with a valid response.
Source: Statistics Canada, Survey of Labour and Income Dynamics, 1993, 1996, 1999, 2002 and 2005.

reflect varying immigration policies leading to differences in the ethnic, cultural and socioeconomic status of immigrants. That is, in Canada immigrants tend to be more educated because of the focus on skilled applicants, and women of educated families are less likely to be teenage mothers (Galarneau and Morissette 2004). Furthermore, the difference between the U.S. and Canada in the prevalence of teenage childbearing within visible minority groups may be partly attributable to different ethnic profiles.

Teenage mothers more likely to marry in their teens but not before their first birth

About half of teenage mothers also married in their teens, compared with only 8% of adult mothers (Table 1). And while 71% of the latter married in their twenties, only 28% of the former did so. Furthermore, teenage mothers were more likely to remain single (19% versus 13%).

Although teenage mothers tend to marry young, 39% waited at least one year after having their first child. Only 20% of teenage mothers married prior to giving birth and 22% married in the same year. The majority of adult mothers, on the other hand, married prior to their first birth (72%) with only 6% marrying the same year and 8% the subsequent year. While 19% of teenage mothers never married, 46% reported being in common-law relationships during the reference year. Although individuals in common-law partnerships have many characteristics similar to the married, it was not possible to combine these groups since no date was provided for the formation of the union.

Although most teenage mothers were eventually married (60%) by the time they were in their 30s, the proportion still trailed that of adult mothers (76%). On the other hand, teenage mothers were more likely to live in common-law relationships (14% versus 10%). Nevertheless, teenage mothers were still more likely to separate or divorce. Furthermore, teenage mothers were almost three times more likely to report marrying more than once (16% versus 6%).

Since teenage mothers, by definition, started their families at a younger age, they would also have had more time to have subsequent children. Indeed, teenage mothers, on average, had larger families (2.5 children) than adult mothers (2.0 children). However, adult mothers may also have delayed the completion of their families. So, while teenage mothers are more likely to have completed their family formation, adult mothers may still be having more children well into their 30s or later.

Table 2 Marginal effects of the impact of teenage motherhood on education

	High school graduation	Completing postsecondary education
	Baseline probability (%)	
	91	55
Marginal effects	% points	
Timing of motherhood and marriage		
Teenage, married before age 20	-17*	-19*
Teenage, not married before 20	-17*	-14*
Adult, married before age 20	-7*	-17*
Adult, not married before 20	ref	ref
Father's education		
Less than high school	ref	ref
High school diploma	5*	10*
Postsecondary completed	7*	22*
Mother's education		
Less than high school	ref	ref
High school diploma	5*	10*
Postsecondary completed	8*	19*
Personal background		
Aboriginal	-4*	-12*
Non-aboriginal	ref	ref
Immigrant	0	6
Non-immigrant	ref	ref
Visible minority	2	-1
Non-visible minority	ref	ref
Elementary or high school education		
Newfoundland and Labrador	-4*	7*
Prince Edward Island	-5*	4
Nova Scotia	-2	4
New Brunswick	-2	-5*
Quebec	-3*	-2
Ontario	ref	ref
Manitoba	-1	-8*
Saskatchewan	4*	3
Alberta	2	-4
British Columbia	1	-5
Elsewhere	-5*	-11*
Wave		
1993	-2	-3
1996	ref	ref
1999	1	2
2002	3*	7*
2005	3*	11*
Year of birth		
1949 to 1955	3	4
1956 to 1960	2*	1
1961 to 1965	ref	ref
1966 to 1970	1	1
1971 to 1975	0	-1

* statistically significant from the reference category (ref) at the 0.05 level or better
Source: Statistics Canada, Survey of Labour and Income Dynamics 1993, 1996, 1999, 2002, 2005.

Teenage mothers less likely to have completed high school or postsecondary education

Separate logit regressions examined women's outcomes for high school and postsecondary completion (see *Modeling socioeconomic outcomes*). The sample consisted of women aged 30 to 39 in each reference year who had previously given birth. The baseline probabilities of completing high school and postsecondary education among all mothers were 91% and 55%, respectively (Table 2). As expected, even after controlling for other factors, the timing of motherhood was found to be significantly related to the chances of finishing high school or postsecondary education. Teenage mothers were 17 percentage points less likely to complete high school and between 14 and 19 points less likely to complete postsecondary studies. This is consistent with a study using the Youth in Transition Survey, which found teenage pregnancy and childrearing to be related to dropping out of high school (Bowlby and McMullen 2002).[5]

The timing of marriage and its interaction with the timing of motherhood was also significant. Marriage and birth do not necessarily coincide for young mothers. For example, the first birth for married teenage mothers may have been planned, but for those who were single the birth was more likely to be unplanned. Therefore, the combination of the timing of motherhood and marriage may reflect some unobserved differences either in personal characteristics or in their situations that may influence educational outcomes. The results show that teenage mothers not married prior to age 20 were slightly more likely to

Modeling socioeconomic outcomes

While descriptive analysis can provide some information on the relationship between teenage childbearing and long-term socioeconomic outcomes, multivariate analysis takes other factors that may influence these outcomes into account.

The outcomes studied were educational attainment, labour force participation, and living in low income. The education models used separate logit regressions estimating the marginal effects of teenage childbearing and other controls on the probability of completing high school and postsecondary school. A multinomial logit regression estimated the marginal effects of teenage childbearing and other controls on the probability of full-year, full-time employment, some employment, and not working. The income model used a logit regression to estimate the marginal effects of teenage childbearing and other controls on the probability of living in low income.

Logit regressions were chosen for the education and income models since the outcome variable had two responses. Similarly, the multinomial logit regression was chosen for the labour model because the outcome variable had three responses. Bootstrap weights were used to account for the effect of multi-stage sample selection in SLID. Stata was used to implement the model and bootstrap weights.

Note: Younger teenage mothers (age at first birth 17 and under) and older teenage mothers (age at first birth 18 to 19) were tested separately but no significant differences were evident, so the two groups were collapsed into one.

complete postsecondary school, having a 5 percentage point smaller decline than those married prior to age 20.

As expected, family background variables were statistically significant and showed that women of fathers with completed postsecondary education were 7 percentage points more likely to complete high school and 22 points more likely to complete postsecondary studies than women whose fathers had completed less than high school. Similarly, women whose mothers had completed postsecondary education were 8 points more likely to complete high school and 19 points more likely to complete postsecondary studies. Even parents who completed only high school were positively related to the likelihood of completing high school and postsecondary studies for women (between 5 and 10 percentage points). The interactions between age at first birth and parental education were not statistically significant and were subsequently dropped. Overall, parental education would seem to have a great influence on a woman's own educational outcome, regardless of teenage motherhood.

Immigrant and visible-minority status were also included in the model but were not statistically significant. The findings make sense—Canada's immigration policies are concentrated on skill selection, so many immigrants are going to be highly educated. Women with an Aboriginal background were found to be less likely to complete high school (-4 percentage points) or postsecondary studies (-12 points), consistent with previous research (Siggner and Costa 2005).

The model also controlled for the province or territory where most of the elementary or high school education was completed.[6] Although the results suggest some statistically significant differences between a few provinces and Ontario, they reflect conditions some 11 to 25 years prior to the reference year. Controls for cohort effect were not statistically significant. Finally, respondents from the 2002 and 2005 surveys were 3 percentage points more likely to have completed high school and 7 to 11 points more likely to have completed postsecondary studies than the 1996 respondents. This is not surprising since increasing emphasis has been put on higher educational attainment in order to qualify for better jobs. This can be seen especially in the higher marginal effect in recent years for postsecondary graduates.[7]

Education helps counter negative effects of teenage childbearing on labour market participation

Previous research on the consequences of teenage childbearing has focused on education because, in most cases, it largely determines earnings, labour force participation, and occupation. Little research has delved more deeply into other socioeconomic outcomes of teenage childbearing. However, because job-related skills acquisition and significant earnings growth are concentrated at the start of one's career, teenage motherhood may affect a woman's long-term wage rates. Indeed, in this study, real composite wage rates[8] for teenage mothers were $10.93 compared with $13.29 for adult mothers,[9] consistent with other studies. Women in Canada who postponed having children earned at least 6% more than those who had children early (Drolet 2002). Similarly, in the U.S. teenage childbearing reduced white women's earnings by 23% and black women's by 13% (Klepinger et al. 1997).

Among mothers aged 30 to 39 in the reference year, the baseline probability of full-year full-time employment was 41%; for some employment, 34%; and for not working, 24%. The results demonstrate an impor-

tant relationship between teenage childbearing and education on labour force participation (Table 3). The interaction between the timing of motherhood and education level shows that teenage mothers with less than high school were 9 percentage points less likely to be in full-year full-time employment and more likely not to have worked during the reference year than adult mothers who graduated high school. Similarly, adult mothers with less than high school were 10 points less likely to be in full-year full-time employment and 13 points more likely to be not working during the reference year. However, what is striking is that teenage mothers with a high school diploma were no different from the reference group. Furthermore, teenage mothers with a postsecondary degree or certificate were actually more likely to be in full-year full-time employment than adult mother counterparts (13 percentage points versus 5 points above the reference profile). The results suggest that education plays an important role in women's labour force participation. That is, women who were teenage mothers were just as likely, if not more so, than adult mothers of a similar education level to work full year, full time. However, other unobserved characteristics such as family support, social network and a variety of other resources, or psychological traits may be at play.

Family background remains an influence even in the long run. Women whose mothers finished high school or postsecondary studies were 5 percentage points more likely to work full-year full-time than women whose mothers had less than high school. Possibly, mothers act as role models for their daughters and highly educated mothers may instil values that encourage higher educational attainment and labour force participation. However, fathers with completed postsecondary education had a statistically significant negative effect. This counterintuitive result may be due to omitted variables. For example, parental income, parental divorce and growing up with only one parent could influence outcomes. However, since SLID is limited to parental education, it was not possible to control for other potentially relevant background information.

In terms of personal background, immigrant women were 7 percentage points less likely to be working full year and more likely to be not working than non-immigrants. This may reflect immigrant women's preference to stay home with their children even if they are no longer of preschool age. Also, immigrant women may have fewer employment opportunities due to language barriers. Recognition of foreign credentials and foreign work experience, and limited job contacts may also be factors. Visible minority women were no more or less likely to be in full-year full-time employment than other women. However, visible minority women were less likely to be in other forms of labour force participation and more likely to be not working. Women who reported an Aboriginal background did not have a statistically different likelihood of being in full-year full-time employment. The results suggest that differences in women with an Aboriginal background and labour force participation were explained by other factors in the model.

Compared with married mothers, only single (never married) mothers were statistically different. Single mothers were 12 percentage points less likely to be in full-year full-time employment and 13 points more likely to not have worked during the reference year. This finding is consistent with previous research on lone mothers and their labour force participation (Dooley and Finnie 2001).

Other controls were also included and found to be statistically significant. These include disability status, province of residence, area size of residence, and year for which the respondent was surveyed.

Education matters more in determining low income

As noted, women who were teenage mothers have much lower average earnings than women who were adult mothers. However, their total personal after-tax income was not statistically different ($16,500 versus $17,500).[10,11] Although government transfers to families of the former were higher than to families of the latter (a difference of $2,600), after-tax family incomes showed a much larger gap. Families of women who were teenage mothers, on average, had after-tax income of $40,300 compared with $47,300 for families of adult mothers. However, most of the difference disappeared once family size was taken into account. Families of women who were teenage mothers had adjusted after-tax income of $19,900 compared with $23,800 for families of adult mothers.[12]

Nevertheless, 21% of families of women who were teenage mothers had adjusted income below the low-income measure (LIM) compared with just 12% of adult mother families. However, as with the labour outcomes, the logit model on the probability of living below the LIM showed a statistically significant (at the 0.05 level or better) interaction between timing of motherhood and education.[13] Both women who were

Table 3 Impact of teenage childbearing on labour force attachment of mothers aged 30 to 39

	Full-year full-time employment	Some employment	Did not work
	Baseline probability (%)		
	41	34	24
Marginal effects		% points	
Timing of motherhood and education			
Teenage, less than high school	-9*	1	8*
Teenage, high school diploma	-1	-1	1
Teenage, postsecondary completed	13*	2	-15*
Adult, less than high school	-10*	-3*	13*
Adult, high school diploma	ref	ref	ref
Adult, postsecondary completed	5*	5*	-10*
Father's education			
Less than high school	ref	ref	ref
High school diploma	-1	1	0
Postsecondary completed	-6*	3	3
Mother's education			
Less than high school	ref	ref	ref
High school diploma	5*	-3*	-1
Postsecondary completed	5*	-1	-4*
Personal background			
Immigrant	-7*	-1	7*
Non-immigrant	ref	ref	ref
Visible minority	1	-9*	8*
Non-visible minority	ref	ref	ref
Aboriginal background	0	-6*	5
No aboriginal background	ref	ref	ref
Disability reported	-15*	-2	17*
No disability reported	ref	ref	ref
Children born (mean = 2, ref)	-9*	3*	6*
Living with preschool-age children	-5*	-1	6*
No preschool-age children	ref	ref	ref
Gave birth during year	5	-6*	1
Did not give birth during year	ref	ref	ref
Age (mean = 35, ref)	1*	0	-1*
Marital status			
Married	ref	ref	ref
Common-law	2	-1	-2
Separated	2	-3	1
Divorced	5	-9*	4
Widowed	-8	-12	20
Never married	-12*	-1	13*

* statistically significant from the reference category (ref) at the 0.05 level or better
Source: Statistics Canada, Survey of Labour and Income Dynamics 1993, 1996, 1999, 2002, 2005.

teenage mothers and adult mothers with less than high school were more likely to be living below the LIM than adult mothers with a high school diploma (4 and 5 percentage points respectively). Likewise, women who were teenage mothers and adult mothers who completed postsecondary studies were 3 and 5 points less likely to fall below the LIM. Overall the baseline probability of living in low income was 9%.

Conclusion

Teenage childbearing has been shown to have negative and long-term effects on women's socioeconomic outcomes. Overall, teenage mothers in Canada had a lower probability than adult mothers of completing high school and postsecondary education, even after controlling for family background and other characteristics. Teenage childbearing and education are significantly related to a woman's labour market participation. In terms of labour force participation, the results suggest education matters more than family background—women with similar education had similar likelihoods of being in full-year full-time employment. Only women who were teenage mothers with a postsecondary education were more likely to be working full year full time during the reference year than women who were adult mothers with similar education. And although the mean wages for teenage mothers were lower than for women who were adult mothers, teenage mothers and adult mothers with similar education were almost equally likely to be living in low income. Furthermore, family background was no longer statistically significant for these mothers when it came to the likeli-

hood of living in low income. Similar results were found for the probability of living in low income. These results suggest that education may help counter the negative effects of teenage childbearing. However, other unobserved characteristics such as family support, social network and a variety of other resources, psychological traits, and other factors may also have an influence on outcomes.

In summary, the results from this study suggest that teenage childbearing is related to lower educational achievements, which may in turn lead to longer-term effects on labour force participation and rates of living in low income. However, teenage mothers and adult mothers with similar levels of education also had similar labour market participations and rates of living in low income—suggesting that education is more important in determining labour force participation and income in the long run.

Perspectives

Notes

1. Previous research has raised the endogeneity of teenage mothers as a predictor of educational attainment. Individuals intending to attain a high level of education can use preventive measures (e.g. birth control or abortion) to avoid pregnancy if they expect teenage childbearing to affect their schooling. Furthermore, high achievers may perceive their opportunity costs as education foregone if they become teenage mothers, while low achievers may not perceive any opportunity costs in education foregone given that they do not perceive education as important. Therefore, those who become teenage mothers may be those who never expected to achieve a high level of education. The perception of educational attainment may affect the probability of teenage motherhood. To correct for this endogeneity, researchers have employed instrumental variable (IV) analysis—estimating the probability of a teenage birth for each respondent in the survey with variables (instruments) correlated with the probability of a teenage birth but not with high school completion. The estimated probability is then used as a regressor in the model to estimate the probability of completing high school. Compared with the traditional analysis, which treats teenage childbearing as an exogenous variable, IV analysis finds that the teenage childbearing variable remains significant but with smaller estimated coefficients and marginal effects (Klepinger et al. 1995). In this study, teenage childbearing is treated as an exogenous variable since SLID does not lend itself to IV analysis. Consequently, results are likely to be accurate in predicting teenage childbearing as statistically significant in explaining the probability of finishing high school and postsecondary school. However, the estimated marginal effects may be overestimated.
2. The original target population included both women and men who had been teenage parents. However, men represented only 14% of the subsample. This low proportion of men suggests possible under-reporting and selection bias. With this in mind, the study focused only on women.
3. Due to the continuous nature of the original 'age at first birth' variable, it was possible to separately analyze younger teenage mothers (age at first birth less than 18) and older teenage mothers (age at first birth 18 or 19). Although on occasion older teenage mothers had characteristics closer to those of young adult mothers (age at first birth 20 to 24), more often than not they were more similar to younger teenage mothers.
4. Birth rates from Vital Statistics are not available by ethnicity, so the teenage Aboriginal birth rate, on- and off-reserve, is unknown.
5. The Youth in Transitions Survey could be used to study the educational outcomes of teenage childbearing. However, since the survey is only in its fourth cycle it would not be possible to observe longer-term socioeconomic outcomes such as employment and income of women in their 30s.
6. Information on the area of residence of women prior to or during the completion of high school or postsecondary school is not available in SLID.
7. Some other variables were tested but subsequently dropped as not statistically significant, based on the adjusted wald-test: age in reference year; and year of childbirth. As well, years since first birth was dropped since it is highly correlated with age at first birth. The total children born to the mother was also dropped as it is available only for the reference year. In order to determine the effect on high school and postsecondary completion, the model would require the total number of children prior to high school and postsecondary completion, however, this is not available in SLID. Furthermore, other research has found that after controlling for age at first birth, educational differences by number of children become quite small and unimportant (Grindstaff et al. 1991).
8. In 2005 dollars.
9. Older mothers who had their first birth in the reference year and were not employed full year were excluded in estimating the average composite hourly earnings.
10. All figures are in 2005 dollars.

11. Older mothers who had their first birth in the reference year and were not employed full year were excluded in estimating income averages, because those on maternity leave with their first child during the reference year will likely have a lower income compared with previous years and would therefore bias the results.
12. Income was adjusted using the family equivalence scale to reflect family size and composition. For more details on the family equivalence scale, see *Data source and definitions*.
13. The logit model for low income estimated the probability of living below the LIM. Covariates were interaction between timing of motherhood and education, parental education, personal background, marital status, family-related variables, demographic characteristics, disability status, survey year, age and year of childbirth.

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